

LOVE CANAL SUPERFUND SITE
CITY OF NIAGARA FALLS
NIAGARA COUNTY, NEW YORK

DELETION FROM THE
NATIONAL PRIORITIES LIST

RESPONSIVENESS SUMMARY

SEPTEMBER 2004

RESPONSIVENESS SUMMARY

Concerning the Deletion from
the National Priorities List of the
Love Canal Superfund Site
City of Niagara Falls, Niagara County, New York

INTRODUCTION

On March 17, 2004, the Environmental Protection Agency (EPA) published a notice in the *Federal Register* of its intent to delete the Love Canal Superfund site (Love Canal site) from the National Priorities List (NPL). The publication of this notice also announced a 30-day public comment period on the proposed deletion. On March 18, 2004, a public notice announcing the notice-of-intent-to-delete Love Canal from the NPL also appeared in The Buffalo News and the Niagara Gazette. During the comment period, EPA received some critical comments regarding the proposed deletion. No comments were received from current residents in the Love Canal Emergency Declaration Area neighborhoods. The public comment period ended on April 16, 2004.

This Responsiveness Summary provides a summary of citizens' comments received during the 30-day public comment period, as well as EPA's responses to those comments. All public comments received during the comment period were considered in EPA's final decision to delete the Love Canal site from the NPL.

Attached to the Responsiveness Summary is the following Appendix:

Appendix A - Correspondence Submitted During the Public Comment Period

SUMMARY OF COMMENTS AND RESPONSES

Comment #1: Commenters expressed concern that the wastes that were originally disposed of in the Love Canal landfill have not been removed and remain in the center of the community. Hence, these commenters do not want the Superfund designation of the Love Canal site to change. They do not want it deleted from Superfund's NPL. These commenters also want the landfill to be subject to long-term monitoring which is not left to the sole responsibility of the corporation that created the problem.

Response #1: There seems to be a basic misconception by these commenters that deletion of the Love Canal site from the NPL means that EPA will not have any further involvement with the Love Canal site or that, if there were to be a need for further Superfund response at the Love Canal site, such a response could not be provided since the Love Canal site would no longer be on the NPL. It is, therefore, important to note that EPA's responsibility for the Love Canal site does not cease after the deletion from the NPL. The NCP (40 C.F.R. 300.425 (e)) states that a site that is deleted from

the NPL is eligible for further fund-financed remedial actions should future conditions warrant such action. Whenever there is a significant release from a site deleted from the NPL, the site shall be restored to the NPL without application of the Hazard Ranking System. The deletion of a Superfund site from the NPL is a specific process outlined in the NCP (40 C.F.R. Part 300), which governs the Superfund investigation and cleanup process. A Superfund site can be deleted from the NPL when one of the following criteria, as identified in the NCP (40 C.F.R. 300.425(e)), is met. These criteria are as follows: 1) responsible or other parties have implemented all appropriate response actions required; 2) all appropriate Fund-financed response under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA or, as it is commonly referred to, Superfund) has been implemented and no further response action by responsible parties is appropriate; or, 3) the remedial investigation has shown that the release poses no significant threat to human health or the environment, and therefore, taking remedial measures is not appropriate. In the case of the Love Canal site, the first two criteria have been met and the third is not applicable, since remedial measures were taken.

The containment, leachate collection and treatment and monitoring remedy at the Love Canal site was selected consistent with the requirements of the Federal Superfund law. Excavation and removal of hazardous materials from landfills can potentially create more contaminant exposure to human health and the environment than a containment remedy. Moreover the large volumes of contaminated soils from an excavated landfill must be treated and redispersed at other secure hazardous waste facilities, requiring either utilization of limited existing landfill capacity or the creation of new landfills to accommodate the excavated waste from old landfills. The excavated landfill requires filling with clean backfill materials and still must be subject to engineering controls due to residual contamination that could not practicably be removed. For these reasons, EPA developed a presumptive remedy for large landfills consisting of containment through capping and leachate collection and treatment. The Love Canal site remedy is a permanent remedy that is consistent with the requirements of the Superfund law.

The remedies implemented at the Love Canal site over the past 25 years were conducted using the most up-to-date scientific methods. These include containment of the Love Canal landfill and the excavation, treatment and ultimate disposal of all Love Canal generated wastes, including thousands of cubic yards of sediments from the sewers and creeks. The ongoing cleanup process through leachate collection and treatment has reduced the quantities of hazardous materials contained within the Love Canal landfill. These waste materials have been and continue to be removed through the carbon filtration process and the dense non-aqueous phase liquid (DNAPL) collection process. Liquid wastes have been treated in the on-site carbon treatment facility. DNAPL wastes have been collected and destroyed, initially at an incinerator at the Occidental Chemical Corporation (OCC) facility in Niagara Falls, and more recently at permitted commercial facilities outside of New York State. Spent carbon has been incinerated at permitted commercial disposal facilities. The contaminated sediments from the sewers and creeks have been thermally treated/ and/or disposed of in licensed

disposal facilities. These remedies have reduced the toxicity, mobility and volume of the wastes at the Love Canal site. The excavation of the wastes remaining in the contained landfill is not practicable for the reasons discussed above.

The leachate collection and treatment system, including the barrier drain network, has been operational for over two decades. A three-foot clay cap covers the original landfill. Above the clay is a 40 mil high density polyethylene liner which was, in turn, covered with approximately 18 inches of topsoil. Monitoring conducted at the Love Canal site has demonstrated that the containment and treatment systems are effective in containing the contamination in the landfill.

All remedial activities have been completed at the Love Canal site, which is currently in the operation, maintenance and monitoring (OM&M) phase. Since operation and maintenance (O&M) is not defined as a response under the NCP (40 C.F.R. 300.425(f)), Superfund sites that are in the long-term response action or O&M phase can be deleted from the NPL. Deletion from the NPL, however, does not mean that the remedy will not be continued to be operated, maintained and monitored, nor that such responsibilities are left solely to the "corporation that created the problem."

Long-term-monitoring of the Love Canal site is required pursuant to two Consent Decrees, the first between OCC and the State of New York dated July 1, 1994 and the second between OCC and the United States dated March 19, 1996 (hereinafter the Consent Decrees). The Consent Decrees require that the operation, maintenance and monitoring of the Love Canal site be continued as long as necessary to protect human health and the environment. All operation, maintenance and monitoring must be performed consistently with the National Contingency Plan and EPA and New York State Department of Environmental Conservation (NYSDEC) technical and administrative guidance. Both EPA and NYSDEC have Site Coordinators who are responsible for the oversight of the operation, maintenance and monitoring work performed by OCC pursuant to the Consent Decrees. Both Consent Decrees are subject to the continuing jurisdiction of the United States District Court for the Western District of New York. The Consent Decrees can only be terminated by Court order upon a demonstration by OCC that the requirements of the Consent Decrees are no longer necessary for the protection of human health and the environment. EPA and NYSDEC will continue to maintain a strong presence at the Love Canal site many years into the future.

The day-to-day operations of the containment and treatment systems at the Love Canal site are being managed by Miller Springs Remediation Management, Inc. (MSRM), a subsidiary of Occidental Petroleum Corporation. MSRM is managing the Love Canal site for the OCC and is under the direct oversight of the NYSDEC.

Annual OM&M reports are produced as part of OCC's requirement under the Consent Decrees. Also, as part of OCC's OM&M responsibilities, MSRM routinely performs

modifications and/or adjustments to the leachate collection and treatment facilities to ensure that the system operations remain at an optimum performance level.

Both EPA and NYSDEC provide oversight to the Love Canal site operations and review the OM&M reports to ensure that 1) the containment and treatment facilities are operating properly, 2) the appropriate monitoring wells in and around the containment area are sampled and 3) the water level measurements from select piezometers on the Love Canal site continue to show that groundwater flow is directed towards the barrier drain.

In addition, as part of EPA's policy for Superfund sites where the remedy will result in substances remaining on-site above health-based levels that would allow for unrestricted use or unlimited exposure, EPA conducts five-year reviews to confirm that the remedy continues to adequately protect human health and the environment. In the case of the Love Canal site, institutional controls are in place that do not allow for unrestricted use nor unlimited exposure. In September 2003, EPA issued the first five-year review for the Love Canal site operations. NYSDEC also provided technical oversight for the preparation of the five-year review report and concurred with EPA's findings. The five-year review report found that the containment and barrier drain system were working properly and that no follow-up actions were necessary to continue to protect human health or the environment. After an exhaustive review process, the State of New York, through the NYSDEC, concurred on the proposed NPL deletion of the Love Canal site.

The implemented remedies at the Love Canal site were intended to protect human health and the environment. The leachate collection and treatment system are routinely maintained and are in excellent operating condition. Access to the Love Canal site is controlled within the fenced Love Canal Landfill, and the extensive monitoring indicates that there are no exposures of hazardous materials to human or environmental receptors.

The neighborhoods immediately surrounding the fenced area of the Love Canal site are known collectively as the Emergency Declaration Area (EDA) and divided into seven separate areas. The vacant parcel of land in EDA Area 1 is owned by the City of Niagara Falls and is to be developed as a future greenspace. The vacant parcels of land in EDA Areas 2 and 3 are properly zoned and have deed restrictions in place to comply with the original New York State Department of Health's (NYSDOH's) 1988 Habitability Decision, which identified commercial/industrial use only in EDA Areas 1, 2 and 3, unless remediated. These properties have been sold to small business owners who, in turn, may subsequently sell said properties to real estate developers for future development or develop the properties themselves. EPA and NYSDEC will review any planned development in these areas in order to ensure that the deed restrictions in place are enforced. The 93rd Street School site has been redeveloped as baseball fields for the community.

Homes in EDA Areas 4 and 5 have been refurbished and sold, reestablishing a viable neighborhood. New housing projects have been and are being constructed in EDA Areas 6 and 7. No residential or commercial development has occurred nor will ever occur within the 70-acre fenced containment area.

Comment #2: One commenter indicated that there is no bottom liner to prevent the Love Canal wastes from leaking out of the landfill into the groundwater and aquifer below the Love Canal site. This contamination is likely leaking into the Niagara River, the closest sink for the groundwater table in the area.

Response #2: There is a naturally occurring clay layer at the base of the Love Canal landfill. This layer created a bathtub effect whereby the wastes were brought to the surface during a period of high water table occurrences in the late 1970s, ultimately creating the historic environmental emergency at the Love Canal site. Although this clay layer is not specifically part of EPA's remedy for monitoring the Love Canal site, it has provided some benefit to the overall treatment process by helping to contain the waste materials, as the leachate is collected and transported to the treatment facility.

Two major surface water study projects: 1) the Niagara River Toxic Management Plan and 2) the Lake Ontario Lakewide Management Plan, currently are being managed by a joint United States, Canada and New York State group, which includes Environment Canada, Ontario Ministry of the Environment, NYSDEC and EPA. Significant improvements have been made, with additional work planned, to address toxic loadings into these waterways from all sources. At this time, since contaminated groundwater is being contained by the operations at the Love Canal site, there is no available scientific information to suggest that the Love Canal site is a contributing source to any degradation in the Niagara River or Lake Ontario water quality.

Comment #3: One commenter expressed concern that the number of monitoring wells installed at the Love Canal site is inadequate to detect whether contaminants leaking from the landfill have escaped through the containment system.

Response #3: There are over 200 monitoring wells and over 100 piezometers installed in and around the Love Canal containment area. The monitoring wells are used to measure potential contamination in the overburden and bedrock groundwater and the piezometers are used to measure groundwater levels. These instruments of observation have been determined to adequately assess whether the ongoing collection and treatment system at the Love Canal site is working. The agencies believe the current network of monitoring wells provides sufficient overview of the entire Love Canal site. Each year a select grouping of 40 or so monitoring wells are sampled to provide the best contamination overview at the Love Canal site. NYSDEC oversees MSRM's selection of which monitoring wells to sample on a yearly basis. This process of well selection is intended to produce the most efficient examination of the ongoing cleanup process. NYSDEC also splits samples from roughly 15% of the wells sampled by

MSRM and is confident in its assessment that the barrier drain is working effectively, *i.e.*, the groundwater is being captured by the barrier drain system and the remaining contamination is being contained.

As stated in EPA's September 2003 five-year review, the 2002 data showed the compounds [a variety of volatile organic compounds (VOCs), semi-VOCs and organochlorine pesticides] sampled for are at or below detection limits in four monitoring wells [MW-10225C, MW-10215, MW-10270 and MW-10278], located west and southwest of the containment area. The 2003 sampling of these wells shows similar results from 2002, indicating further that the containment system with the barrier drain continues to operate as designed.

Comment #4: One commenter was concerned that 1) the NPL deletion criteria for the Love Canal site had not been met, specifically referring to the Love Canal EDA Habitability Study, and 2) the supporting documentation in the *Federal Register* notice does not show how these criteria have been met.

Response #4: See Comment #1 and EPA's response thereto above, concerning the issue of the Love Canal site meeting the NPL deletion criteria. As a rule, the *Federal Register* notice provides an overview of the history of a site cleanup but does not provide technical summary data nor does it explain, in detail, the technical operations that occur at a treatment facility. The technical assessment of the ongoing OM&M at the Love Canal site is contained in the annual OM&M reports. The annual OM&M reports include the yearly collected monitoring data. As stated above, the five-year review report also provided a technical assessment of the data that were gathered at the Love Canal site and explains why the operations at the Love Canal site continue to be protective of human health and the environment. These documents, along with the Final Close Out Report, provided the basis for the issuance of *Federal Register* Notice of Intent to Delete for the Love Canal site and are all located for public review at the Love Canal site repository at EPA's Public Information Office in Niagara Falls.

With respect to the 1988 Love Canal EDA Habitability Study, CERCLA, as amended in 1986, required EPA to conduct a habitability and land-use study to assess the risks of inhabiting the EDA, to compare the level of hazardous waste contamination in the EDA to that present in other comparable communities, and to assess the potential uses of land within the EDA (e.g. residential, commercial, industrial and recreational) and the risks associated with such potential uses. The habitability criteria, the subsequent pilot studies and the design and findings of the study were scrutinized by EPA's peer review panel comprised of independent scientific experts. The study assessed the risks associated with inhabiting the EDA by comparing the levels of certain indicator chemicals in the EDA soils to levels found in four comparable communities. These indicator chemicals were deemed by the scientists conducting the study to be representative of those chemicals which would likely have been present if the area had been affected by chemicals from the Love Canal disposal site. The comparison

approach used in the Study assessed the relative risks of inhabiting the EDA by comparing contamination levels in the EDA to levels found in comparable residential communities which were then currently inhabited but not affected by a chemical landfill.

After extensive deliberation and public discussion, the Love Canal Technical Review Committee concluded that the comparative approach used in the Habitability Study was the most scientifically sound way to assess the habitability of the EDA. The comparison approach was also supported by EPA's independent panel of experts which included, among others, representatives from Harvard University, the New York Medical Center, and Massachusetts General Hospital.

The Habitability Study, combined with other studies of the contamination from the Love Canal site, represented the most comprehensive environmental investigation in the history of the Superfund program. The peer-reviewed Habitability Study provided the basis for NYSDOH's Habitability Decision.

Comment #5: One commenter expressed concern that, since all landfills leak, they need to be monitored in perpetuity.

Response #5: As stated in the Response to Comment #1 above, the Consent Decrees mandate the monitoring of the landfill as long as necessary for protection of public health and the environment. The leachate collection and treatment system is in place and operating and is effective in containing the wastes at the Love Canal site. The ongoing monitoring that has been performed at the Love Canal site has consistently demonstrated the effectiveness of the leachate collection (through the barrier drain system) and of the ultimate treatment of that leachate by the carbon filter system. The Love Canal site will be monitored for decades to come in order to ensure that the on-site wastes remain contained. As indicated in Response #2, there is no available scientific information to suggest that the Love Cana site is a contributing source to any degradation of water quality in the Niagara River or Lake Ontario.

Comment #6: One commenter is concerned that there is no process in place that makes the results of the monitoring and testing available to the public.

Response #6: All results of the maintenance and monitoring program, as identified in the annual OM&M reports, are available to the public. OCC is required by the Consent Decrees to make annual reports available to the public and to mail copies of the report to individuals (maximum of fifty) who may request the reports. In addition, these reports are submitted regularly to EPA and NYSDEC and made available to the public by EPA and NYSDEC at NYSDEC's offices in Albany and Buffalo, New York, EPA's office in New York, New York and at EPA's Public Information Office in Niagara Falls, New York.

Comment #7: What data from monitoring wells or other testing show that the Love Canal site has been remediated to a level deemed protective of human health and the environment.

Response #7: As stated in the Response to Comment #5, the historical consistency in the monitoring data over the years shows that the Love Canal systems are operating as designed. The data have not shown any breakdown of the containment system. The many wells, which ring the Love Canal site and are located within the fenceline and beyond any areas of potentially significant contamination, were located based on soil borings and groundwater sampling. The existing physical and hydraulic barriers have been specifically designed to prevent possible migration of contaminants. The likelihood of a catastrophic failure of the containment system is extremely rare. The monitoring systems, currently in place, are designed to detect possible contamination before it leaves the fenced area of the Love Canal site so that appropriate remedies can be safely undertaken in a timely fashion so as to prevent wastes in the Love Canal from affecting nearby residents.

Comment #8: What monitoring wells will be sampled to evaluate the long-term integrity of the containment system and the isolation of the Love Canal wastes that remain in the landfill? What wells will be tested? What substances will be tested? Who will do the testing? How often will the testing be done?

Response #8: Of the 200 plus monitoring wells that are located in the Love Canal area, approximately 40 monitoring wells are sampled each year. Some wells are rotated; some wells are sampled every year. These monitoring wells are selected by NYSDEC and are identified in each annual OM&M Report. As stated above, the wells are sampled for an array of volatile organic compounds (VOCs), semi-VOCs and pesticides. MSRM conducts the sampling; Ecology and the Environment under contract to MSRM performs the analyses and Conestoga Rovers Associates performs the Quality Assurance/Quality Control for validation of the data, all in accordance with EPA and NYSDEC protocols and subject to EPA and NYSDEC oversight. Monitoring well sampling of the bedrock wells is conducted on an annual basis, usually during the second quarter of the calendar year. The overburden wells are sampled every two years, and water level measurements are conducted four times a year at a number of the on-site piezometers. The operations building is manned by one operator who is supported by on-site staff familiar with the operation of the process logic control (PLC) systems. Though automatic for leachate collection, the PLC system has to be enabled by the operator to actually treat the leachate. In addition, the Love Canal processes can be viewed from any of the other MSRM treatment plants at Durez and Hyde Park Landfills. EPA and NYSDEC review all monitoring data.

Comment #9: One commenter had a two-part question: 1) Who will decide if additional remediation is necessary? and 2) What criteria will be used to determine failure of the system?

Response #9: EPA and NYSDEC will determine any issues of potential remedy failure or ineffectiveness. The criteria will be those contained in the NCP and various EPA and NYSDEC technical and administrative guidance documents, including both guidance documents in effect at the time the Consent Decrees were approved, as well as any currently effective guidances that are in effect at the time of any controversy or dispute concerning the remedies that have been performed at the Love Canal site. Any additional remedies will be selected in accordance with the requirements of CERCLA and the NCP and any more stringent New York State law and regulations.

Comment #10: One commenter wanted to know who will pay for any additional remediation, should it be necessary.

Response #10: In 1988-1989, the United States District Court for the Western District of New York, on motions by the United States and the State of New York for partial summary judgment, determined that OCC was liable as a responsible party for the Love Canal site remediation under CERCLA, as well as the State common law of nuisance. If further remediation were to be required, OCC would remain liable for any such additional remediation. Both Consent Decrees have provisions reserving the United States and the State of New York's rights to compel OCC to perform further response actions if the prior response actions are no longer protective of human health and the environment.

It also should be reiterated that the NCP specifies that deleting a site from the NPL does not affect the site's eligibility for further Superfund-financed remedial actions should future site conditions so warrant. 40 C.F.R. §300.425(e)(3). The United States and the State of New York have also reserved their rights under the Consent Decrees to conduct further response actions themselves and seek reimbursement of costs from OCC. OCC has reserved its rights to defend against a requirement for it to conduct future remedies necessary to protect human health and the environment on the basis that the conditions giving rise to the need for additional remediation were caused by the governments or by third parties.

APPENDIX A

Correspondence Submitted
During the Public Comment Period

April 16, 2004

Damien Duda
Remedial Action Project manager
Emergency and remedial response Division
US Environmental Protection Agency
Region II
290 Broadway, 20th Floor
New York, NY 10007-1866

Re: Notice of intent to delete the Love Canal Superfund site from the National Priorities List.

Dear Mr. Duda:

As long-time participants and observers of the events at Love Canal, we have prepared the following comments on the agency's intent to delete the Love Canal toxic waste site from the National Priorities List (NPL).

We are opposed to the proposal to delete the Love Canal landfill from the NPL for the reasons listed below.

- 1) The 21,000 tons of toxic waste that were dumped into the Love Canal landfill have never been removed and thus remain in the center of the community.
- 2) There is no bottom liner to prevent the 21,000 tons of toxic waste from leaking out of the landfill into the groundwater and aquifer below the site. This contamination is likely leaking into the Niagara River, the closest sink for the groundwater table in the area
- 3) The monitoring wells installed at the site are inadequate to detect whether contaminants leaking from the landfill have escaped the containment system.
- 4) The criteria for deleting the Love Canal landfill from the NPL has not been met.
- 5) The supporting documentation provided by the Agency in the Federal Register Notice to Delete fails to show how the criteria needed to delete the Love Canal landfill from the NPL have been met.

Damien Duda
US Environmental Protection Agency
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- 6) All landfills eventually will leak such that continuous monitoring of the site is needed in perpetuity.
- 7) There is no process in place that makes the results of any monitoring or testing conducted by the Occidental Chemical, the same company that is responsible for the creation of the Love Canal disaster, available to the public.

Attached are more detailed comments on each of these point as well as a short list of questions that we hope you will address.

Sincerely,

Lois Marie Gibbs
Executive Director

Stephen U. Lester
Science Director

**Comments Provided in Opposition of the Proposal to Delete the Love Canal
Superfund Site from the National Priorities List.**

Submitted by
Center for Health, Environment and Justice
Falls Church, VA 22040
April 16, 2004

- 1) The 21,000 tons of toxic waste that were dumped into the Love Canal landfill have never been removed and thus remain in the center of the community.

As long as the 21,000 tons of toxic waste that made Love Canal the most notorious man-made environmental disaster in U.S. history are present, this site should remain on the National Priorities List (NPL). Long-term monitoring is needed to ensure that when this site begins to leak (if it is not already), that quick and decisive action will be taken to ensure that there will be no repeat of the human tragedy that this community suffered once already. This long term monitoring cannot left solely in the hands of the same corporation that is responsible for creating this problem in the first place.

- 2) There is no bottom liner to prevent the 21,000 tons of toxic waste from leaking out of the landfill into the groundwater and aquifer below the site. This contamination is likely leaking into the Niagara River, the closest sink for the groundwater table in the area

The containment system installed at the site included a leachate collection system that was placed around the perimeter of the landfill, and a liner and clay cap placed over the top of the landfill. Nothing was installed to prevent the toxic waste that was dumped in the landfill from leaking out through the bottom. Though many people believe that the toxic waste lays on top of a layer of “wet clay” that is considered to be relatively impermeable, to this day there is no hard data defining the thickness of this layer and whether in fact all of the toxic waste lays on top of it. There is also no assurance that the toxic waste could never leach through this layer of wet clay. The only way this could be done would be to excavate the waste to make sure that this is true and obviously no one is going to do this.

However, monitoring wells could be installed that are designed to detect any leakage through the bottom of the landfill. Although three wells were installed into the deep rock formation below the landfill in the mid 1980s, it is not clear that samples are still being collected from these or other similar wells. The US EPA’s 5-year review report says nothing about whether any wells exist that have been designed to detect

contaminant leakage from the bottom of the landfill and if any data exists to address this question. These wells are important because they could provide evidence that contaminants are leaking out the unlined bottom of the landfill. Testing from deep water wells should be part of the long term monitoring program.

- 3) The monitoring wells installed at the site are inadequate to detect whether contaminants leaking from the landfill have escaped the containment system.

It took 5 years after the completion of the containment system for the EPA and New York state to install groundwater monitoring wells around the perimeter of the Love Canal landfill. This delay prevented the agency from establishing an accurate baseline level for contaminants in groundwater following the completion of the containment system. Although several hundred monitoring wells have been installed, almost all of these wells are located on either side and in close proximity to the containment system around the four sides of the landfill. While installing wells close to the containment system is important, it's also important to install and sample wells located further away from the containment system in order to provide assurance that contaminants are not migrating away from the landfill. In fact, there are only a handful of wells located outside of the fenced area.

The 5-year review document indicates that contaminants have consistently been found in the monitoring wells. In 2002, contaminants were found in four groundwater monitoring wells "located west and southwest of the containment system" and in Monitoring Well (MW)-10135 which is described as the "most contaminated well on the site." MW-101035, which has consistently showed contamination, is located within the containment area, but the other four wells appear to be located outside of the containment system. If, in fact, this is the case, then this data provides evidence that contaminants either exist outside or are migrating beyond the containment system. The 5-year review report does not provide any information about whether the groundwater in the vicinity of these four wells is effectively captured by the containment system. Either way, it is troublesome that contaminants are being found outside the containment system. This finding highlights the need for vigilance and continued groundwater monitoring. Currently there are insufficient wells located outside of the containment system to accurately evaluate whether contaminants are migrating away from the Love Canal landfill.

- 4) The criteria for deleting the Love Canal landfill from the NPL has not been met.

The Agency provides three criteria necessary for deleting a site from the NPL including:

- o The site has been remediated to a level deemed protective of human health and the environment.

The agency has NOT shown that the Love Canal landfill site has been remediated to “a level deemed protective of human health and the environment.” This is especially problematic in the area outside the clay cap that covers the landfill. Despite the fact that the New York Department of Health (DOH) conducted an extensive Habitability study that was published in 1988, this report was seriously flawed then and remains so today. At the time that report was release, we submitted comments that included the following key criticisms that are still relevant:

- 1) The DOH never acknowledged that any of the Love Canal area was “safe” for human habitation. They only stated that certain areas of Love Canal are as habitable as other areas of Niagara Falls. This conclusion says nothing about whether the “site has been remediated to a level that is deemed protective of human health and the environment.”
- 2) The state changed its comparison groups in mid study in order to assure that some areas of the Love Canal Emergency Declaration Area (EDA) would be found to be habitable. When the state compared the results of its initial testing to the comparison areas that were carefully selected by an open and public process, they realized that none of the areas of the EDA would be found to be habitable. This was a politically unacceptable outcome for the state. There is no other explanation for what the state did next. For no clear or obvious reason, the state identified two new comparison areas. Conveniently, there was existing contamination at both sites. One was located downwind from the Occidental Chemical incinerator where waste similar to what was dumped at the canal was burned (waste from Love Canal is now burned at this site). The second new comparison site was located near the Love Canal site and was in an area of a known hot spot of contamination. The DOH’s conclusions about what portions of the EDA were habitable were based ONLY on comparisons to the two new comparison areas. There was no reason to add these two comparison areas other than to ensure that portions of the Love Canal EDA would be found to be “habitable.” This flawed process does not provide any assurance or evidence that the “site has been remediated to a level that is deemed protective of human health and the environment.”
- 5) The supporting documentation provided by the Agency in the Federal Register Notice to Delete fails to show how the criteria needed to delete the Love Canal landfill from the NPL have been met.

The Federal Register notice includes no data or discussion of any monitoring data collected at the site and how this data shows that the containment system is working or that no contamination is occurring in any of the wells. This lack of documentation is totally unacceptable. At a minimum, summary data should be provided as part of the Federal Register notice that clearly shows where the monitoring wells are located, how many have been installed, what substances have been tested, and what the results of the testing has been. Furthermore, there should also be a summary of the results

from a number of years (such as the past 5 years) that clearly show what contamination if any was found over the years.

- 6) All landfills eventually will leak such that continuous monitoring of the site is needed in perpetuity.

The agency has published documents that make clear a fundamental truth about landfills: they all leak. It is just a matter of time. The presence of the containment system and the continuous collection of leachate from the landfill is clear evidence of this fact. It makes no sense to delete this site from the NPL as long as the 21,00 tons of toxic waste remain in the landfill. It will eventually leak if it is not already leaking out through the bottom of the landfill.

- 7) There is no process in place that makes the results of any monitoring or testing conducted by the Occidental Chemical, the same company that is responsible for the creation of the Love Canal disaster, available to the public .

The EPA and state of NY have handed over the operation, maintenance and monitoring of the Love Canal landfill site to Occidental Chemical. However, it is unclear what if any public involvement process is in place to share the results of the testing that they do with the public. The public needs to have access to all the data collected by Occidental as part of the operations and maintenance of the site as well as the long-term monitoring. It is also inappropriate to hand over the long-term monitoring of the landfill to Occidental Chemical, the same company that is responsible for the creation of the Love Canal disaster in the first place.

In addition to a response to the above comments, please address the following questions.

- 1) What data from monitoring wells or other testing show that the “site has been remediated to level deemed protective of human health and the environment.”
- 2) What monitoring wells will be sampled to evaluate the long term integrity of the containment system and the isolation of the 21,000 tons of toxic waste that remain in the landfill? What wells will be tested? What substances will be tested? Who will do the testing? How often will the testing be done?
- 3) Who will review the monitoring data and how will it be made available to the public?
- 4) Who will decide and by what criteria that the integrity of the site has failed and that additional remediation may need to be taken?
- 5) If additional remediation is needed, who will pay for it?

Residents For Responsible Government, Inc. ©



Mr. Damian Duda
Project Manager
USEPA, Region 2
290 Broadway
New York, NY 10007-4269

April 20, 2003

Dear Mr. Duda:

As a local group of concerned citizens we request that the EPA not change the Super Fund designation of the Love Canal area of Niagara Falls, New York. That area needs to remain on the Super Fund National Priorities List, especially when it still requires two full time operators to pump and treat its leakage.

It was supposed to have been remediated, but temporary containment and removal of only a little of the hazardous chemical materials is not a safe solution. When the EPA has to establish specifications for the "allowable" leakage from containment liners, it is clear that the bottom of the one hundred year old ditch can not assure residents that the area is secure. There is no assurance that these toxic materials will not resurface in adjoining areas or along the rock strata under Niagara Falls.

If this site is delisted, only the NYS DEC will have any presence, and only a casual monthly role at that. That state agency has a terrible record of protecting residents of the region and assuring proper clean up and limitation of toxic waste. The EPA's promise to review only on a five year interval is insufficient.

The Love Canal situation is all too similar to another site nearby in Niagara County, known as the Lake Ontario Ordnance Works, where Chemical Waste Management operates possibly the largest solid toxic waste dump in the entire country. It takes hazardous materials from over 30 states, Canada, and off shore. That entire area was heavily contaminated starting with WW II chemical and munitions production, and later with uncontained radioactive burial, surface dispersement and air born radioactivity over the communities. At both of these locations, today, there are families with youngsters who should be guarded from any such pollutants moving into new homes nearby. (Balmer Road, just down stream and down wind from CWM, and in Niagara Falls next to the Love Canal wastes which have only been capped with plastic and clay).

It appears that the EPA, and certainly New York State through its Department of Environmental Conservation, continue to write off western New York and intend to perpetuate the region as the toxic trash capitol for eastern North America. On behalf of the many residents affiliated with RRG, we ask that both areas continue to be viewed as Super Fund sites. Emphasis on proper clean up and health concerns remain a critical priority.

As background, RRG is a non-partisan organization which informs residents on the hazards of toxic waste in the region, especially the chemical and radiological materials in and around CWM which sits in the middle of the Lake Ontario Ordnance Works, a major WW II munitions production and radioactive handling and disposal site. We remain willing to discuss this with appropriate state and federal agencies.

Yours truly,

Vincent Agnello, President, RRG

CC: NYS DEC, Federal legislators

472 Richmond Avenue
Apartment 2
Buffalo, NY 14222
alercher@hotmail.com
April 16, 2004

Damian J. Duda, Remedial Project Manager
EPA Region 2
290 Broadway
New York, NY 10007

Dear Manager Duda,

Love Canal should not be removed from the National Priorities List. The work done at Love Canal, Niagara Falls, NY by the Environmental Protection Agency and its contractors is impressive. The site is not clean, however, and never will be. Since EPA efforts and expenditures will be needed for the indefinite future at Love Canal, removal from the Priorities List sends the wrong message.

What is really needed is a way of classifying sites that are under control but not clean. That is the actual status of Love Canal.

More broadly, the Superfund program needs secure funding by taxes on polluting industries. Without that, the future of Love Canal, and the many less-famous sites that are similar, is doubtful.

Sincerely,



Aaron Lercher



Margret Brown

04/06/2004 10:16 AM

To: Damian Duda/R2/USEPA/US@EPA
cc:
Subject: Comment re Love Canal Delisting

Please see below for a comment received by OSRTI, Information Management Branch.

Margret L. Brown
brown.margret@epa.gov
USEPA (5202G)
703-603-8876
FAX: 703-603-9133

----- Forwarded by Margret Brown/DC/USEPA/US on 04/06/2004 10:16 AM -----
Public

Information Request Form
Information Request Tracking System
Task ID: MB040329071850

* ☒ CERCLIS ☐ AD-HOC
☐ RODS ☐ CD

☒ Open ☐ Closed

Contract Number 263-01-D-0050

Task Order Number EPA-2004-C-2289

COTR Name: Margret Brown
COTR Office: OSRTI/IMB
COTR Phone: 703-603-8876

Please respond to this request. If you cannot meet the deadline specified below, please notify me immediately.
Return completed form to: Margret Brown, 5202G/IMB, 703-603-8876

Deliverable Requirements

Respond: within one (1) working day of the above date.
Complete Request: within ten (10) working days of the above date.

Authorization of EPA WAM:

Sign Margret Brown, USEPA

03/29/2004

Request Date: 03/29/2004 **Completion Date:**
Assigned to: Margret Brown
Received as: Superfund Customer Service
Sent as:
* ☒ Non-FOIA ☐ FOIA

Requests:

CERCLIS Requests:

- ☐ Five-Year Review
- ☒ General CERCLIS Questions
- ☐ Internet Questions/Comments
- ☐ List 10
- ☐ List 11
- ☐ List 8T
- ☐ List 9
- ☐ NPL Fact Sheet/Site Narrative
- ☐ Record of Decision (ROD)
- ☐ SCAP 11
- ☐ SCAP 12

Requestor Information:

Sara Schley

Wendell Massachusetts

seedsara@aol.com

(p)

(f)

Action Log:

Date	Summary of Actions
03/29/2004	Please count me as one who is AGAINST removing Love Canal from the Superfund list.
03/29/2004	This comment maybe in response to the notice in the March 17, 2004 (Volume 69, Number 52) Page 12608-12612 Federal Register (www.gpoaccess.gov/fr/index.html): EPA is proposing to deleted the Love Canal Superfund site from the NPL. Written comments should be submitted to: Damian J. Duda, RPM, Emergency and Remedial Response Division, U.S. Environmental Protection Agency, Region II, 290 Broadway, 20th Floor, New York, New York 10007-1866. FOR FURTHER INFORMATION CONTACT: Damian Duda, at the address provided above, by telephone at 212-637-4269, by electronic mail at duda.damian@epa.gov or by FAX at 212-637-3966.

Attachments:

Use the paper clip smart icon to attach any documents here:

SRA Signatures:
Task Received:

Sign	GWEN DODDY-LOWIT, SRA	03/29/2004
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Task Completed:

To whom it concerns,

I am writing to you concerning the EPA decision to remove 'Love Canal' in Niagara Falls, New York from the Super-Fund contaminated list of places deemed toxic and dangerously polluted, unfit for human habitation. It still remains that.--

Love Canal should not, in my opinion, be removed from this list. Due to the fact the toxins have not been removed from the area, merely "contained". The public should be protected from future problems that may arise from any contact. 94

with this most notorious Super-
Fund toxic-waste site.--

Sincerely,
Wayne Umateter
Port Jervis, N.Y.

March 20th, 2004

To Whom What May Concern,

My name is John McLowan and I am almost 16 years old. I have been interested in Love Canal ever since my teacher in 2nd grade gave us a lesson on it in class. I have read Love Canal My Story by Lois Gibbs and have in the past written to Lois Gibbs. It really makes me nervous to think that Love Canal is considered to be safe. There is no way that you can tell me that there is a way to decontaminate every inch of the soil around the area. Does it really make it safe now? How long will the construction of the canal last before it starts leaking again. There is no way that you can tell me that they are going to build more houses around there where the torn down ones used to be. I've been around there recently and I see that there are a lot of homes for sale as well as a lot of new homes being built just a few hundred yards from the canal. I don't give a care that they change the name or build a park where the 93rd street school was, we all know that there is still a large majority of the chemicals still there. What's next, take the large fence down and build there again. It is best to not take Love Canal off the Superfund list because it is not safe and the government could ignore other areas that have went through the same

problems. Would you buy a house then and let your children live in the basement and play in the neighborhood I think not because the fact is that the chemicals are still buried there.

Sincerely,
John McFawa.

Grace Pfisterer
38 Meadow Lane
Chappaqua, New York 10514
May 9, 2004

RECEIVED
JUN 14 2004
OFFICE OF THE
EXECUTIVE SECRETARIAT

Michael O. Leavitt
Environmental Protection Agency
Ariel Rios Building
1200 Pennsylvania Avenue, N. W
Washington D.C., 20460

Dear Mr. Leavitt:

I am an eighth grade student at Bell Middle School in Chappaqua, New York. I have recently done research on Superfund, and I am disturbed at the atrocious cleanups that have been recorded. The illegal cleanups are having a negative effect on people of the community, causing them to become sick or even die.

Tar Creek, in Picher, Oklahoma contains many toxic chemicals. When it rains near Tar Creek, orange goo emerges and clearly shows that unhealthy elements are present. The main chemical in the orange goo is lead. The lead has caused learning disabilities for people who were once perfectly healthy. Unfortunately, other towns throughout the U.S. are experiencing tragedies similar to Tar Creek. Love Canal is an example of extreme irresponsibility in the dumping of wastes. The buildup of waste in Love Canal began in 1942, and in 1953, the dump was full. Problems started to appear and citizens started to notice the effects. Numerous health problems were encountered and death became frequent among those who lived in the area. The mess at Love Canal cost \$275 million. Tar Creek and Love Canal are only two examples of bad cleanups around the nation. Dust piles left behind by companies are appealing to children for recreation, and are causing additional health problems in the U.S.

Problems like those at Tar Creek and Love Canal are difficult and nearly impossible to avoid. If everyone made an effort at handling wastes appropriately it would be doable. The best way to control hazardous waste is to produce less of it. If the amount of waste was cut down a little it would still be of significant help. An alternative to producing less is reusing. Companies could give their unneeded materials to other companies that need them. If businesses explored these options, the sites would already be in better condition. If laws were enforced on the cleaning of Superfund, the country and its people would be healthier and happier. Unlike other complications the U.S. has faced, the cleaning of Superfund is one that can be improved with a little dedication.

I strongly encourage you to propose the idea of enforcing the Superfund Act to the EPA as best as possible. Careless workers should be punished for their actions. People in the U.S. have suffered enough in the last couple of years, and the actions of reckless businesses should not be added on. Please do your best to exercise correct cleaning of sites. It will protect all of us and future generations from disasters that have been confronted before and have not been resolved. Thank you for your attention in this crucial matter. Please let me know if any progress is made.

Sincerely,



Grace Pfisterer

0 AB